

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-24 (Canceled).

Claim 25 (currently amended): A method for modifying a target protein or peptide with a molecular weight of 5,000 or more, comprising allowing an enzyme, which is capable of deamidating amido groups in target proteins and peptides by directly acting upon said amido groups, without cutting peptide bonds and without cross-linking said target proteins or peptides, to act on said target protein or peptide, wherein said enzyme is selected from the group consisting of (a) a polypeptide which comprises the amino acid sequence set forth in SEQ ID NO:6, (b) a polypeptide which comprises the amino acid sequence encoded by the nucleotide sequence set forth in SEQ ID NO:5, and (c) a polypeptide which comprises the amino acid sequence encoded by the nucleotide sequence which has a homology of 80% or more with the nucleotide sequence set forth in SEQ ID NO:5.

Claim 26 (currently amended): The method of claim 25, wherein said target protein or peptide to be modified is derived from a plant or animal such that the functionality—solubility, dispersibility, foamability, foam stability, emulsification

ability, and emulsification stability of said protein or peptide is improved in comparison to that of the protein or peptide untreated with said enzyme.

Claim 27 (currently amended): The method of claim 25, wherein said target protein or peptide to be modified is derived from food such that the functionality solubility, dispersibility, foamability, foam stability, emulsification ability, and emulsification stability of said food is improved in comparison to that of the food untreated with said enzyme.

Claim 28 (currently amended): The method of claim 25, wherein said target protein or peptide is contained in a crude material such that the extraction efficiency of said target protein or peptide is improved in comparison to that of the protein or peptide untreated with said enzyme.

Claim 29 (currently amended): ~~The method of claim 25~~ A method for controlling a transglutaminase reaction, which further comprises the step of allowing a transglutaminase to act on using an enzyme having an activity to deamidate amido groups in [[said]] target protein [[or]] and peptide by directly acting upon the groups without causing severing of peptide bond and cross-linking of protein, wherein said enzyme is selected from the group consisting of (a) a polypeptide which comprises the ammo acid sequence set forth in SEQ ID NO:6, (b) a polypeptide which comprises the amino acid sequence encoded by the nucleotide sequence set forth in SEQ ID NO:5 and (c) a polypeptide which comprises the amino acid sequence encoded by the nucleotide sequence which has a homology of 80% or more with the nucleotide sequence set forth in SEO ID

NO:5 and said target protein or peptide has a molecular weight of 5,000 or more.

Claim 30 (original): The method of claim 29, wherein said enzyme is allowed to act on said target protein or peptide before said transglutaminase is allowed to act on said target protein or peptide.

Claim 31 (original): The method of claim 29, wherein said transglutaminase is allowed to act on the target protein or peptide before said enzyme is allowed to act on said target protein or peptide.

Claim 32 (original): The method of claim 29, wherein said enzyme and said transglutaminase are allowed to act on said target protein or peptide at the same time.

Claim 33 (original): The method of claim 25, which further comprises the step of allowing a protease and a glutaminase to act on said target protein or peptide.

Claim 34 (Canceled).